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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/853,512	05/11/2001	William Clark	M00506/70023	7166

23628 7590 04/03/2002

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EXAMINER

NGUYEN, CHAU N

ART UNIT PAPER NUMBER

2831

DATE MAILED: 04/03/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/853,512

Applicant(s)

CLARK ET AL.

Examiner

Chau N Nguyen

Art Unit

2831

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 February 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23, 26, 27 and 29-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-23 is/are allowed.
- 6) ☒ Claim(s) 26, 27 and 29-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Withdrawal of Finality

1. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35

U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35

U.S.C. 103(a).

4. Claims 30-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Friesen et al. in view of Reede (6,255,593) and Gordon et al.

Friesen et al. discloses communications cable comprising a first twisted pair of insulated conductors, a second twisted pair of insulated conductors, and a jacket enclosing the twisted pairs.

Friesen et al. does not disclose a configurable dielectric separator that separates the first and second twisted pairs, nor the first twisted pair, the second twisted pair and the separator being twisted together about a common central axis. Reede discloses a cable comprising a configurable dielectric separator (110) separating the two wires of one twisted pair from the two wires of another twisted pair contained within the cable (col. 5, lines 45-47) and being substantially flat.

It would have been obvious to one skilled in the art to use the dielectric separator as taught by Reede to separate the two twisted pairs of Friesen et al. since it is taught by Reede that the separator serves to increase the center-to-center distance between the adjacent twisted pairs and thus reduces the level of cross-talk between the twisted pairs (col. 6, lines 2-5).

Gordon et al. discloses a cable comprising a separator separating two conductors, wherein the conductors and the separator are twisted together about a common central axis. It would have been obvious to one skilled in the art to twist the first twisted pair, the second twisted pair and the separator of the modified Friesen et al. cable together about a common central axis to prevent the displacement of the separator and the twisted pairs as taught by Gordon et al.

Re claim 31, the functional recitation of the separator providing a desired crosstalk isolation between the first and second twisted pairs is inherent from the modified cable of Friesen et al. since it comprises structure and material as claimed.

Re claim 32, the at least two grooves in the modified cable of Friesen et al. do not form completely enclosed channels because the separator does not fold upon itself.

5. Claims 33-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Friesen et al. in view of Reede, Gordon et al. and the "Engineering Design Guide" (C&M Corporation).

The combination of Friesen et al., Reede and Gordon et al. (see the above) discloses the invention substantially as claimed except for the separator being a foamed polymer.

The "Engineering Design Guide" discloses that foamed FEP (a polymer) is a known insulating material having flame-retardant and low-dielectric constant properties. It would have been obvious to one skilled in the art to use foamed FEP for the separator in the modified cable of Friesen et al. since foamed FEP has low-dielectric constant and flame-retardant properties as taught by the "Engineering Design Guide".

Allowable Subject Matter

6. Claims 1-23, 26, 27, and 29 are allowed.
7. The following is a statement of reasons for the indication of allowable subject matter: claims 1-23, 26, 27 and 29 are allowed in view of the Terminal Disclaimer filed on Feb. 08, 2002 which is proper and has been accepted.

Response to Arguments

8. Applicant's arguments with respect to claims 30 and 34 have been considered but are moot in view of the new ground(s) of rejection.

Summary

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Communication

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chau N Nguyen whose telephone number is 308-0693. The examiner can normally be reached on Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean Reichard can be reached on (703) 308 3682. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308 3431 for regular communications and (703) 305 1341 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.



Chau N Nguyen
Primary Examiner
Art Unit 2831

CN
July 17, 2002